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News from the United Arab Emirates

Era of solar power is about to dawn

By Joanna Langley

Dubai - Buildings may make power stations redundant by generating their own electricity from solar energy, an industry expert says. Technological advances mean that within five years, buildings could generate enough energy from the sun not only to meet their own needs but also to produce a surplus of electricity which could be used by neighbouring buildings.

Raymond Noble, International Business Development Manager for BP Solarex, said advances in solar technology were moving so quickly that buildings in the UAE could soon become 100 per cent solar efficient.

High-rises in particular could produce excess electricity which could theoretically be stored and channelled to other users.

Speaking on the last day of the third annual Architectural Review Conference, Noble said, "People shy away from solar energy because they think it's expensive to install. Initially costs are high, but some of the claddings used on buildings here are more expensive than solar panels anyway." Noble said the latest developments in solar technology had cut the price of panels by more than half.

"The old crystalline cells cost around \$560 per square metre and the new thin film system costs \$240 per square metre. Unfortunately, the thin film, known as photovoltaic, is not so efficient. However, developments are being made at a tremendous rate and I am confident its energy production will increase soon. The cost will also be slashed over the next three to five years to make solar power a more attractive option."

Noble said solar power had become a viable option because electrical appliances had become far more energy efficient and the problem of storing electricity generated by the sun has been overcome with the development of the fuel cell, the latest high performance battery.

"It's about the same size as a car engine and could easily store power to run an average-size house," he said.

Michael Walker, Technical Manager of Aluminum and Light Industries Ltd, a Sharjah company, said headway in the UAE was being made towards solar power because Sharjah had launched several solar energy development projects.

"We are currently running 12 projects exploring the possibilities of photovoltaics. So far, we have found them able to produce around 24 per cent of a building's power, but that figure will improve. I predict that within five years, 100 per cent efficiency and more will be possible."

Walker added that attitudes towards saving energy would have to change before solar power could become an alternative to current energy sources. "As the price falls, the popularity will rise, but landlords have to be convinced of their investment," he said.

"At the moment tenants pay for the electricity. The attitude of the landlord therefore has to be ecologically sound with a long-term strategy before solar energy will seem a viable option. After all, if someone else is already paying for the electricity, why should they bother to spend on solar panels?"